

**Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**IN THE CLAIMS:**

1. (Original) A method of detecting the onset of an advanced neoplasm or a predisposition to developing an advanced neoplasm in a mammal said method comprising screening for the level of inhibin protein and/or gene expression in a biological sample derived from said mammal wherein an increase in the level of inhibin and/or gene expression is indicative of the onset of an advanced neoplasm or a predisposition to developing an advanced neoplasm.
2. (Original) A method of monitoring for the onset or progression of an advanced neoplasm in a mammal said method comprising screening for the modulation in the level of inhibin in a biological sample derived from said mammal wherein the level of said inhibin relative to the normal level of inhibin is indicative of the onset or progression of an advanced neoplasm.
3. (Original) The method according to claim 1 or 2 wherein the biological sample is selected from the group including serum, tissue extract, body fluids, cell culture medium, extracellular medium, supernatants, biopsy specimens or resected tissue.
4. (Currently Amended) The method according to ~~any one of claims 1-3~~ claim 3 wherein said advanced neoplasm is an advanced malignant neoplasm.

5. (Original) The method according to claim 4 wherein said advanced malignant neoplasm is a metastatic neoplasm.
6. (Currently Amended) The method according to ~~any one of claims 1-5~~ claim 1 or 2 wherein said inhibin is  $\alpha$ -inhibin.
7. (Original) The method according to claim 6 wherein said  $\alpha$ -inhibin is the  $\alpha$ C region of the  $\alpha$ -inhibin protein.
8. (Original) The method according to claim 7 wherein said  $\alpha$ C region comprises amino acids 73-96 of the  $\alpha$ C region.
9. (Original) The method according to claim 6 wherein said  $\alpha$ -inhibin is the  $\alpha$ -inhibin protein and said protein is detected utilising the monoclonal antibody PO#12.
10. (Currently Amended) The method according to ~~any one of claims 1-9~~ claim 1 or 2 wherein said neoplasm is a neoplasm of the prostate[.] , skin, breast, lymph node, lung, salivary gland, liver, gall bladder, pancreas, oesophagus, stomach, colon, rectum, kidney, bladder, cervix, adrenal gland, thyroid, brain, testis or with the endometrium.
11. (Cancelled)
12. (Currently Amended) The method according to claim ~~11~~ 10 wherein said skin neoplasm is a melanoma or a squamous cell carcinoma[.] , said breast neoplasm is an invasive papillary carcinoma or an infiltrating breast carcinoma, said lymph node neoplasm is a lymphoma, said lung neoplasm is a squamous cell carcinoma or lung adenocarcinoma, said salivary gland neoplasm is a pleomorphic adenoma of the parotid gland or a salivary duct carcinoma, said liver neoplasm is a hepatocellular

carcinoma, said gall bladder neoplasm, pancreatic neoplasm, stomach neoplasm,  
colon neoplasm or rectal neoplasm is an adenocarcinoma, said oesophageal neoplasm  
is a squamous cell carcinoma, said kidney neoplasm is a transitional cell carcinoma or  
a renal cell carcinoma, said bladder neoplasm is a carcinoma of the bladder or a  
transitional cell carcinoma of the bladder, said endometrial neoplasm is an  
endometrial carcinoma, said cervical neoplasm is a squamous cell carcinoma, said  
adrenal gland neoplasm is an adrenal cortical carcinoma or an adrenal  
pheochromocytoma, said thyroid neoplasm is a thyroid papillary carcinoma or an  
invasive follicular carcinoma of the thyroid, said brain neoplasm is a meningioma, or  
said testis neoplasm is a testis seminoma.

13.-50. (Cancelled)

51. (Original) A diagnostic kit for assaying biological samples comprising an agent for detecting  $\alpha$ -inhibin protein or encoding nucleic acid molecule and reagents useful for facilitating the detection by the agent in the first compartment.
52. (Original) The kit according to claim 51 wherein said agent is an antibody directed to  $\alpha$ -inhibin protein.
53. (Original) The kit according to claim 52 wherein said antibody is a monoclonal antibody.
54. (Original) The kit according to claim 53 wherein said monoclonal antibody is PO#12.
55. (Original) A method of modulating the invasiveness of a neoplastic cell, said method comprising modulating the level of intracellular inhibin protein wherein up-

regulating inhibin levels to a functionally effective level induces said invasiveness and down-regulating inhibin levels to a functionally ineffective level inhibits said invasiveness.

56. (Currently Amended) The method according to claim 55 wherein said neoplastic cell is a cell of the skin, lymph node, lung, salivary gland, liver, gallbladder, pancreas, cervix, [[or]] brain[.].oesophagus, stomach, colon, rectum, kidney, bladder, small intestine, large intestine, larynx, nasal cavity, throat, neural tissue, endometrium, adrenal gland, thyroid, brain, testis, breast or prostate.

57.-60. (Cancelled)

61. (Original) A method for the treatment and/or prophylaxis of a condition characterized by an advanced neoplasm or a predisposition to the development of a condition characterized by an advanced neoplasm in a mammal, said method comprising modulating the level of intracellular inhibin wherein down-regulating said inhibin levels to a functionally ineffective level inhibits invasiveness.

62. (Currently Amended) The method according to claim 61 wherein said neoplasm is a neoplasm of the skin, lymph node, lung, salivary gland, liver, gallbladder, pancreas, cervix, [[or]]brain[.].oesophagus, stomach, colon, rectum, kidney, bladder, small intestine, large intestine, larynx, nasal cavity, throat, neural tissue, endometrium, adrenal gland, thyroid, testis, breast or prostate.

63.-66. (Cancelled)

67. (Currently Amended) The method according to ~~any one of claims 55-66~~ claim 55 wherein said neoplastic cell is a malignant neoplastic cell.

68. (Original) The method according to Claim 67 wherein said malignant neoplastic cell is a metastatic neoplasm.

69. (Currently Amended) The method according to ~~any one of claims 55-68~~ claim 55 or 61 wherein said inhibin is  $\alpha$ -inhibin.

70. (Currently Amended) The method according to ~~any one of claims 55-69~~ claim 55 wherein said modulation is downregulation of inhibin and said downregulation is achieved by contacting said neoplastic cell with a proteinaceous or non-proteinaceous molecule with functions as an antagonist to the inhibin expression product.

71. (Original) The method according to claim 70 wherein said molecule is an antibody.

72. (Original) The method according to claim 71 wherein said antibody is PO#12.

73. (Currently Amended) The method according to ~~any one of claims 55-69~~ claim 55 wherein said modulation is achieved by contacting said neoplastic cell with a proteinaceous or non-proteinaceous molecule which modulates transcriptional and/or translational regulation of the inhibin- $\alpha$  gene.

74. (Original) The method according to claim 55 wherein said modulation is upregulation of inhibin levels and said upregulation is achieved by contacting said cell with a proteinaceous or non-proteinaceous molecule which functions as an agonist of the inhibin expression product.

75. (Original) The method according to claim 55 wherein said modulation is upregulation of inhibin and said upregulation is achieved by introducing into said cell a nucleic acid molecule encoding inhibin or functional equivalent, derivative or

homologue thereof or the inhibin expression product or functional derivative, homologue, analogue, equivalent or mimetic thereof.

76.-77. (Cancelled)

78. (Currently Amended) A pharmaceutical composition comprising an agent capable of modulating the functionally effective level of inhibin together with one or more pharmaceutically acceptable carriers and/or diluents when used in the method of ~~any one of claims 55-69~~ claim 55.